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USB Protocol Suite™ 3.80 Build 800 - Release Notes

Updated: February 24, 2010

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1. Overview

This Read Me file contains last-minute product information for the USB Protocol Suite™ software for Microsoft Windows. For full instructions on using the software and the hardware, please see the User's Manual and other documents provided with this product.

Important Note: Please uninstall all older CATC/LeCroy USB software (USBTracer, USBAdvisor and USBMobileHS) before installing USB Protocol Suite. The older applications are NOT compatible with the new software and device drivers. Traces recorded with the older software can be loaded in the new USB Protocol Suite software. It automatically converts the traces to the new file format (the original file will remain).

2. System Requirements

The following is a list of recommendations for the configuration of the host machine that runs the USB Protocol Suite application and that is connected to the analyzer/exerciser hardware. Please note that the application would operate on systems with less memory and slower CPU rate than the recommended; however, for best results it is recommended that the host machine meets or exceeds the suggested configuration.

2.1. Software

Operating System (Voyager, USBTracer/Trainer, Advisor):
Microsoft Windows XP, Windows Vista 32, Windows Vista 64, Windows 7 (32-bit), Windows 7 (64-bit)

Operating System (USBMobileHS, USBMobile T2):
Microsoft Windows XP, Windows Vista 32, Windows 7 (32-bit)
Required setup:
Microsoft Internet Explorer, version 7 or newer.
Note to USBTracer/Trainer users:
Please disable the function: "Allow the Computer to turn off this device to save power." This can be disabled in the My Computer Properties (System Properties) window under the Hardware Tab. To do so, go to 'Device Manager' > 'Universal Serial Bus Controllers' > 'USB Hubs'. Find the Hub that corresponds to the analyzer/exerciser. Double-click it to show the Properties dialog. Select the Power Management tab. Uncheck "Allow the Computer to turn off this device to save power." If this feature is enabled (checked), it may cause the analyzer/exerciser to hang after a firmware or BusEngine update. If you do not want to change this attribute, you can instead re-enable the port by power-cycling your computer.

2.2. Hardware

Processor:
For optimum performance, use processors of Intel's I7, or other compatible processors with clock speed of 2GHz or higher. Minimum
Processor requirement is Pentium 4 family.
Memory:
For the best performance, it is recommended to have physical RAM twice the size of the recording buffer setup – 2GB or more (minimum of 512MB of RAM).
Hard Disk:
At least 400MB of free hard disk space is required for the installation. Additional disk space is needed for the operation of the applications and for storing the recorded data in files during the recordings process (can be as much as 4GB when recording a full buffer size).
Display:
Resolution of at least 1280 x 1024 with at least 16-bit color depth is recommended (resolution of 1024 × 800 with 16-bit color is a minimum).
Connectivity:
Voyager M3 & M3i support USB 2.0 Hi-Speed and 10/100/1000 Ethernet host interfaces. USB 2.0 Full-Speed host interfaces are not supported on Voyager M3 nor M3i. For Ethernet host interfaces, both DHCP and Static IP configurations are supported; however, Static IP configuration requires a USB 2.0 connection for first time IP address configuration.
USBTracer/Trainer supports USB 2.0 Hi-Speed or Full-Speed host interfaces.
Advisor supports USB 2.0 Full-Speed host interfaces.
USBMobileHS and USBMobile T2 support PCMCIA interfaces. ExpressCard is NOT supported. For an ExpressCard-to-PCMCIA adapter solution for Vista – 32 bit and Win 7 – 32 bit systems, contact psgsupport@lecroy.com.
No specific hardware is required to view pre-recorded traces.

3. Release Notes

3.1. What's New

- This is version 3.80 of the USB Protocol Suite.
- New Features
    - Low power state triggering
    - Framing error Trigger
    - Simultaneous capture 2.0 and 3.0
    - Simplified Rec Options (Simple/Advanced selection)
    - New RTS counters & displays (Error rates)
    - CRC Error injection for Exerciser – **See Note Prior to Section 3.2 Known Issues**

    - Enhanced WaitPacket Exerciser function
    - Search for Packet Headers in Find
    - Script control of Exerciser Terminations
    - Exerciser GUI for creating SCSI scripts & Standard Requests
    - SCSI level Triggers and Filters in 3.0
  - Electrical Tests with decoding of BERC, BRST and BCNT packet types
    -
- This release supports the following LeCroy products:
  - Voyager M3/M3i
    - Main BusEngine version 1.19
    - Serdes BusEngine version 1.11
    - Firmware version 1.21
  - USBTracer/Trainer
    - Analyzer-only BusEngine version 2.62
    - Host Emulation BusEngine version 2.62
    - Device Emulation BusEngine version 2.62
    - Firmware version 1.10 (UPA2500) or 1.09 (UPA2500H)
  - Advisor
    - BusEngine version 1.67 (MBID 0x40) or 2.02 (MBID 0x50)
    - Firmware version 1.07
  - USBMobileHS, USBMobile T2
    - BusEngine version 1.03
    - Firmware/Driver version 1.00
- This release supports the following specifications:
  - USB 3.0 specification version 1.0 including ECN# 001 of April 4, 2009
  - USB 2.0 specification up to ECN of July 16, 2007

- This release includes fixes for the following issues:

Bug Id	**Summary**
3153	VSE Link Command extensions
3295	Data pattern match trigger
3158	RTS byte counts wrong
3255	RTS throughput wrong
3292	Crash when scrolling through SCSI Decodes
3226	VBus relay thrashing when LTSSM set to Disable Idle in Exerciser
3155	Crash when brining up App layer only
3252	Rec options summary tab problem
2892	Link Stats overflow
3218	Crash with Compliance on Vista 64
3187	Problems starting 1st script in Compliance
3165	Compliance problems on Win XP
3033	HOT RESET and POLLING commands in Host Exerciser not working
2883	Problems with Slow Clock recording
2709	Filter In fixed
2487	Search on TP Header
3163	“Break Immediate” option for pipe commands
2707	Throughput of RTS matching Bus Utilization
3150	Traffic Summary shows DP Header and DP Payload counters with 0 value separate from D
3087	Files requiring update after just being captured
3085	2 Consecutive framework TC’s cause USB app hang

3115	Transaction Engine should use 512 MaxPacketSize for control endpoints
3122	OUT transaction after NRDY decoded as IN
3148	Decoded SCSI response needed at OP layer rather than Data (x bytes)
3158	Byte count in RTS fixed
3162	Bus engine needs to set “Done” at correct time
3164	Wrong path set in Rec Options for Vista, Win 7 (Compliance)
3166	Compliance test 51 problem on Vista 32
3167	Pass/Fail report in compliance only for tests which were executed
3168	USB3 transactions not decoded
3174	SCSI decode show 2 data fields instead of combining them
3205	Cant auto-launch files after 1st install
3208	Transaction Data Length problem
3223	Cant trig on external input with Advisor (missing from GUI)
3160	Add framing error trigger
3159	Low power state trigger

Note: CRC Error injection for Exerciser

The following information was added too late to make the release of the Manual

The definition for the second Dword of the PipeCommandData (described on page 55 of the Voyager USB 3.0 Exerciser Generation Script Language Reference Manual) has been extended. The modifications are below in bold.

```
#Dword 2
StreamID  : 16

ForceSeq  : 1 = 0  # Special bit, to force the sequential processing of this Pipe Command
BrkOnNRDY : 1 = 0  # Special bit, to force break on NRDY for this Pipe Command
BrkImmed  : 1 = 0  # Special bit, to force break immideately for this Pipe Command
Crc32Err  : 1 = 0  # Special bit, to force CRC32 error for the first Data Packet for this Pipe Command

Rsvd4     : 7 = 0
PP        : 1 = 0
Rsvd5     : 4 = 0
```

The **Crc32Err** bit has been added allowing for generation of a CRC32 error. A CRC32 error will be injected in the first data packet sent by this pipe command.
An example of the usage (sending a USB device request with CRC error):

Example:

```
SendPipeCommand( PIPE_CMD_WRITE_DATA, PIPE_TYPE_CONTROL, 8, 1, SB_USER_DEFINED, 1 )
 {
      PipeCommandData
      {
        DevAddr = 0
        Endp    = 0
```

Data = $RequestPayload

Crc32Err = 1 # will send the data packet with CRC32 error and retry it properly when it is not acknowledged by the device

}

}

3.2. Known Issues

Bug Id	Summary
2095	Event trigger settings still active in Manual Trigger mode.
2385	In some cases, the graphical Bus Utilization report may indicate that not enough memory is range of the trace file to analyze.
2460	In rare cases, software might not recognize valid USB 3.0 packet framing if the first symbol i
2537	In some cases, you may have to recompile a USB 3.0 exerciser script if you disconnect/reco
2678	Can't start the application by double-clicking a trace file.
2862	Compilation of modified USB3 emulation script on Windows 7 32 fails first time and works se
2873	Exerciser failure caused by switching 3.0 emulation scripts
2908	Cascading trigger not working
3022	Explicit CRC in Exerciser script doesn't match what is sent
3177	At beginning of trace, bad timestamps, LFPS and Electrical Idle Duration overflows
3250	Negative timestamps in combined USB 3.0 & 2.0 trace
3178	IPS in TSEQ and Link packets

General

- Voyager M3 may not work correctly if connected over Ethernet and USB at the same time. Please use only one type of interface.
- Errors may appear in the last couple of packets of a recording which are not real errors. They are a side effect of the recording terminated during the middle of a packet. Also, the first packet in a trace may be a partial one.
- In USB 2.0 Auto Speed Detect mode, the first few (up to ~20) packets may have errors on a high speed trace due to bouncing of the speed selection relay. These packets should be ignored.
- The External Trigger Out signal level is forced low at the beginning of each recording. This might cause false triggers on externally attached equipment.
- For USB 3.0 traffic capture, in some cases the analyzer might not correctly lock to the 5Gbps signals on power up, or it may lose lock after a long period of usage. If this occurs, you may issue a soft reset to the capture engine by selecting "Record | Reset SuperSpeed Capture Engine" from the menu. After performing this reset, you will have to retrain the link on your devices.
- The "Auto RxDetect" mode is designed to recognize 3.0 hosts and devices and present 3.0 terminations to them when they are both plugged in. In some cases, the timing is such that the Host and Device go into USB 2.0 mode, or don't connect. If this occurs, try doing a Disconnect/Reconnect cycle of VBus by hitting the "Momentary Disconnect" button on the toolbar. In other cases, you will have to disable then re-enable the xHCI Host controller driver in the Windows 7 Device Manager of your PDK.
- **Important note:** Windows Vista and Windows 7 user editable files (Automation, Samples, Scripts, etc.) are stored in:

<drive letter>:\Users\Public\Documents\LeCroy\USB Protocol Suite\

This is due to those Operating Systems' policy that the Program Files (application) folders are read-only. Those files and folders are

Stored in the application folder on Windows XP.

3.3. API

Automation:

- There are several sample projects included with the application. To run them, you should make sure that the USB Protocol Suite application is already installed.
- The library file name to be used is: ***USBAutomation.tlb***.
- **HTML Sample:**
- For editing the HTML sample code you can use a text editor or other HTML-editing tools.
- **CPP sample:**
  1. To compile the Visual C++ sample project you first need to install the Microsoft Visual Studio.
  2. You can select to install the USB Protocol Suite software in a directory different than the default one. If you choose to do so, make sure you add a path to the installation directory in your project's paths list. You can find the ***USBAutomation.tlb*** file in the installation directory. When using Microsoft Visual Studio, the path to the installation directory should be added to the following places in the 'Project Settings' property sheet:
     (1) Under 'C/C++' tab, 'Preprocessor' category in the 'Additional include directories'.
     (2) Under 'Resources' tab, in the 'Additional resource include directories'.
- When a remote server is disconnected abruptly while a client application is still connected, the client application might hang up for several minutes. At the end of this timeout, the client would be released with a "The RPC server unavailable" notification. This is due to Windows conduct. [C0004997]

4. Previous Releases

4.1. Version 3.71 Build 763 (Dec 17, 2009)

- New Features
  - USB 2.0 Compliance Suite (Windows XP only, Contact LeCroy for information)
  - USB 3.0 Compliance Suite (Windows XP Only, Contact LeCroy for information)
  - Save snapshot of Real-Time Statistics data
- This release supports the following LeCroy products:
  - Voyager M3/M3i
    - Main BusEngine version 1.18
    - Serdes BusEngine version 1.11
    - Firmware version 1.19
  - USBTracer/Trainer
    - Analyzer-only BusEngine version 2.62
    - Host Emulation BusEngine version 2.62
    - Device Emulation BusEngine version 2.62
    - Firmware version 1.10 (UPA2500) or 1.09 (UPA2500H)
  - Advisor
    - BusEngine version 1.67 (MBID 0x40) or 2.02 (MBID 0x50)
    - Firmware version 1.07
  - USBMobileHS, USBMobile T2
    - BusEngine version 1.03
    - Firmware/Driver version 1.00
- This release supports the following specifications:
  - USB 3.0 specification version 1.0 including ECN# 001 of April 4, 2009
  - USB 2.0 specification up to ECN of July 16, 2007

- This release includes fixes for the following issues:

Bug Id	Summary
2547	Rec Filtering not working with back-to-back packets (ie filter Link Command follwed by trigge
2608	Filter Out LCs malfunctions in case of multiple LC events.
2644	Filter Out LCs combined with triggering on DHP caused IPSs in USB3 traffic
2645	LC triggering is broken
2669	Filter Out DPP/DPH does not work
2671	Periodical IPS and CRC errors in LC in records with no filtering Idles and Skips
2712	RTS missing LBAD and CRC errors
2718	Bad title in Mass Storage decoding view
2720	Remove External trigger option for USBMobile
2757	Application “Discovery Failed” dialog showing up
2765	Default to use all memory for capture (not saved for USB 2.0 Gen)
2780	Crash when saving USB 2.0 .utg file changes
2892	Link Stats Overflow in RTS
2954	In some cases, Disconnection of 3.0 devices is not seen by analyzer
3001	False CRC triggering in 3.0 traffic
3005	Inaccurate timestamp when in SSC Rx Mode
3018	IPS’s caused by filtering LUP, LDN, LGOODn, and LCRDn
3023	Wrong detection of LFPS
3031	Termination status is not shown after BE or FW update
3037	Channel selection in USB3 trigger events does not apply to Counters
3040	Random garbage at end of decoded data
3051	Periodical IPS instead of DPP
3055	USB 2.0 Capture corrupt when 3.0 is slow clock (ignores slow clock now)
3056	EPF trigger
3060	First sequencer event missing in recorded traces
3061	Filter Out LGOOD does filter out LGOOD packets from Vendor device
3071	LSTTM does not show state changes in views in segmented traces
3084	Issues with SetLinkState (U1/U2)
3090	Corrupted USB 2 packets in Auto Mode with Spooling
3096	Problems scrolling horizontally in Spreadsheet View
3097	LPM Bit Swapped values in packet display
3099	LTSSM not recognize states other than U0
3101	Idles in the middle of packets causing IPS packets
3104	GET_DESCRIPTOR too long to decode (> 100 descriptors in CONFIG)
3111	VSE unable to distinguish between multiple RESERVED fields
3113	SCSI Decoding > 512 byte transfers
3116	Transaction Engine sets EOB bit in packets it sends when not needed
3123	Packets duplicated in Trace View
3124	Expand/Collapse not working on some packets
3131	Crash when scrolling in Spreadsheet View
3143	Payload not available in Spreadsheet View
3164	Compliance Suite not working under Vista or Win 7

4.2. Version 3.70 Build 728 (Oct 22, 2009)

- New Features
  - USB 3.0 Exerciser Transaction Completer
    - Sophisticated automatic handling of Transaction Ack's, NRDY/ERDY, etc.
  - Voyager M3i Analyzer RxDetect Enhancements
  - USB 2.0 Compliance Suite Beta (Contact LeCroy for information)
  - USB 3.0 Compliance Suite Beta (Contact LeCroy for information)
  - Spreadsheet Trace Views with Drag 'n Drop and Filters
  - Compressed CATC Trace View
  - Detail View of individual Packet, Transactions, Transfers, etc.
    - Drag and Drop fields to Spreadsheet Views
  - CRC Error Trigger
  - Updated USB 2.0 and USB 3.0 Decodes of UAS and SCSI
  - Search and Traffic Statistics for SCSI and UAS Levels
  - SCSI Performance Metrics (Trace View, Bus Utilization view and Traffic Summary)
  - Counters for USB 2.0 Triggers
  - Counters and Timers for USB 3.0 Triggers
  - Support for USB 3.0 in Verification Script Engine (VSE)
  - Spread Spectrum Support (Transmit & Receive)

- This release supports the following LeCroy products:
  - Voyager M3/M3i
    - Main BusEngine version 1.16
    - Serdes BusEngine version 1.10
    - Firmware version 1.19
  - USBTracer/Trainer
    - Analyzer-only BusEngine version 2.62
    - Host Emulation BusEngine version 2.62
    - Device Emulation BusEngine version 2.62
    - Firmware version 1.10 (UPA2500) or 1.09 (UPA2500H)
  - Advisor
    - BusEngine version 1.67 (MBID 0x40) or 2.02 (MBID 0x50)
    - Firmware version 1.07
  - USBMobileHS, USBMobile T2
    - BusEngine version 1.03
    - Firmware/Driver version 1.00
- This release supports the following specifications:
  - USB 3.0 specification version 1.0 including ECN# 001 of April 4, 2009
  - USB 2.0 specification up to ECN of July 16, 2007

- This release includes fixes for the following issues:

Bug Id	**Summary**
PnW2875	Setting external triggering in any event caused external pulse is case of any othe
PnW2607	DPH-LGOOD Sequence Trigger
PnW2956,2421	Babble Triggers incorrectly
PnW2804,2872	Crash with Hiding and High Level Decoding of USB 2.0 traffic
PnW2966	M3i 3.0 Dev Emulation stays in U0 when commanded to go to U3 in Auto RxDete
PnW2980	Exported Idle time from Voyager 2.0 trace too small for Exerciser script (device c
PnW293<5,6,7>	Incorrect Error logging in 3.60 release. Fixed in 3.70, but 3.60 traces will remain i
PnW2955	SCSI Operations not decoded correctly
PnW2957	USB 3.0 Exerciser VBus not enabled, so devices do not come up

PnW2934	Replicated timestamps @ 1 uSec intervals occasionally
PnW2864	Exerciser Scrambling mode fixes
PnW2879,2670	Logical idles not being filtered
PnW2615	Filtering not saving capture buffer space
PnW2907,2906	Auto-Decoding not working for 3.0 SCSI traffic
PnW2918	M3 users required to select “Manual” and uncheck “RxDetect” in USB 3.0 Misc R
PnW2875	Setting external triggering in any event caused external pulse is case of any othe
PnW2905	Extremely slow response to Recording Options changes for USBMobile HS and
PnW2858	Add “All Errors” selection in 2.0 Recording options

4.3. Version 3.60 (Aug 15, 2009)

- New Features
  - Support Voyager M3i
  - Voyager M3i:
    - Power (Current and Voltage) capture and display
    - Improved Rx Detection and Termination control
  - Very Slow Clock (supports 700Kbps to 25 Mbps USB 3.0 symbol traffic)
  - Auto Scrambling Detection
  - High Bandwidth Exerciser (>4Gbps in bursts)
  - Verification Script Engine (VSE) for USB 2.0 packets and transfers, and for USB 3.0 transfers.

- This release supports the following LeCroy products:
  - Voyager M3/M3i
    - Main BusEngine version 1.14
    - Serdes BusEngine version 1.10
    - Firmware version 1.16
  - USBTracer/Trainer
    - Analyzer-only BusEngine version 2.62
    - Host Emulation BusEngine version 2.62
    - Device Emulation BusEngine version 2.62
    - Firmware version 1.10 (UPA2500) or 1.09 (UPA2500H)
  - Advisor
    - BusEngine version 1.67 (MBID 0x40) or 2.02 (MBID 0x50)
    - Firmware version 1.07
  - USBMobileHS, USBMobile T2
    - BusEngine version 1.03
    - Firmware/Driver version 1.00
- This release supports the following specifications:
  - USB 3.0 specification version 1.0 including ECN# 001 of April 4, 2009
  - USB 2.0 specification up to ECN of July 16, 2007

- This release includes fixes for the following issues:

Bug Id	**Summary**
PnW2406	Fixed USB 2.0 Device Emulation
PnW2540	Fixed: In some cases, LFPS capture may not be accurate at 2.5Gbps and 1.25 Gbps b
PnW2582	Fixed: Exerciser occasionally gets stuck in Training
PnW2692	Fixed: Restart in RTS not restarting Link statistics
PnW2715	Fixed: SCSI response code 0x70 is not decoded
PnW2758	Fixed: Issues with handling NRDY/ERDY
PnW2770	Fixed: Add "Wait for Termination" to Host Emulation (Fixed in Voyager only)

PnW2784	Fixed: Crash when loading unbalanced traffic between Tx and Rx 3.0 traffic
PnW2786	Fixed: Corrupted packets shown as bad USB2 packets and wrong time stamps in the U
PnW2788	Fixed: [USBTracer] Ext. trigger IN does not work on channel 1
PnW2807	Fixed: RTS is showing up on Advisor and USBMobile
PnW2816	Fixed: Search Direction Backward stopped working.
PnW2817	Fixed: Trigger Header Pattern is losing settings - TP_ACK with the RETRY bit set.
PnW2845	Fixed: Incomplete display of "Configuration Name" in Display Options -> General Windo
PnW2851	Fixed: Wrap with a segment number caused compilation errors in the USB2 device emu
PnW2786	Fixed: Corrupted packets shown as bad USB2 packets and wrong time stamps in the U

4.4. Version 3.51 (July 3, 2009)

- New Features
  - Bug fixes only

- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.12
    - Serdes BusEngine version 1.09
    - Firmware version 1.11

- This release includes fixes for the following issues:

Bug Id	**Summary**
PnW2625	Fixed: Incorrect LTSSM State Transitions.
PnW2650	Fixed: Incorrect Date and Time in Timestamp for long recordings
PnW2719	Fixed: Correct Include paths for UASP 3.0 Exerciser Scripts
PnW2726	Fixed: Incorrectly shown Route String field in packets that have the field reserved
PnW2736	Fixed: Raw Bits view of Low and Hi speed packets shown starting from incorrect electri
PnW2740	Fixed: USB 3.0 External Triggers not available on many event types
PnW2746	Fixed: Old Converted files, large 3.0 files corrupted when updating to 3.50
PnW2749	Fixed: USB 2.0 Rec Options (trig/filt) limited to 2 sequences only (fix: added 6 single st
PnW2750	Fixed: Saving 2.0 Gen files sometimes causes crash
PnW2756	Fixed: Can’t recognize 2500 or 2500H after Gen plug-in removed/inserted
PnW2762	Fixed: USB Mobile shows 2 channels in status bar

4.5. Version 3.50 (June 15, 2009)

- New Features
  - Support USBMobileHS and USBMobile T2 products with USB Protocol Suite software
  - Voyager M3:
    - Real-time Statistics enhancements
  - 2 new CATC Trace viewing modes: Applications Layer and Lower USB Layers
  - “Stacked View”, which collapses repetitive packet and transaction items into one item in the trace view.

- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.12
    - Serdes BusEngine version 1.09

- Firmware version 1.11

- This release includes fixes for the following issues:

Bug Id	Summary
PnW1945	Fixed: When recording USB 2.0 traffic with speed auto-detection enabled, the analyzer devices to fail enumeration. Restarting the recording resolves the issue. If the problem value (High, Full, or Low).
PnW2433	Fixed: Cascaded Voyager M3 analyzers do not time-synchronize USB 2.0 recordings.
PnW2602	Fixed: Wrong transaction decoding caused by TP ACK retransmission
PnW2614	Fixed: TSEQ Trigger triggers on LFPS signals
PnW2618	Fixed: USB 3.0 transaction decoding doesn't handle EOB/ERDY sequence properly
PnW2634	Fixed: USB 3.0 Real-Time Statistics not reporting traffic
PnW2637	Fixed: USB 2.0 Real-Time Statistics showing timestamps at twice the actual time rate
PnW2658	Fixed: Automatic Polarity detection not working. Use manual selections.

4.6. Version 3.40 (May 29, 2009)

- This is version 3.40 of the USB Protocol Suite.
- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.10
    - Serdes BusEngine version 1.09
    - Firmware version 1.09
  - USBTracer/Trainer
    - Analyzer-only BusEngine version 2.62
    - Host Emulation BusEngine version 2.62
    - Device Emulation BusEngine version 2.62
    - Firmware version 1.10 (UPA2500) or 1.09 (UPA2500H)
  - Advisor
    - BusEngine version 1.67 (MBID 0x40) or 2.02 (MBID 0x50)
    - Firmware version 1.07
- This release supports the following specifications:
  - USB 3.0 specification version 1.0 including ECN# 001 of April 4, 2009
  - USB 2.0 specification up to ECN of July 16, 2007
- This release includes the following updates:
  - Voyager M3:
    - USB 2.0 Exerciser – host emulation is now supported
    - USB 3.0 Exerciser enhancements
    - New “WaitPacket” script instruction – allows users to create request/response scenarios more easily
    - New link layer error injection types – LC advertisement, delay LC responses, SLC framing
    - Customizable LFPS parameters
    - Customizable link training
    - Customizable link flow control
    - Support low-power link state transitions
      - USB 3.0 Analyzer enhancements
    - LTSSM View
    - Link State Timing View
    - Link State reports
    - Real-time Statistics enhancements
    - Control analyzer receiver terminations
      - Spool-to-disk recording on Voyager M3
      - Support Ethernet host interface on PCs with multiple network adapters

- Traffic Summary packet range selection
- Support USBTracer/Trainer and Advisor products with USB Protocol Suite software

- This release includes fixes for the following issues:

Bug Id	Summary
PnW1856	In some cases, the SpecView window will open with a larger size than when it was prev
PnW1977	Fixed issue where “Hide Ch1” option in USB 2.0 Packet Hiding in Display Options hides
PnW1982	Fixed issue where in rare cases, the installation may appear frozen at the last stage.
PnW2145	Fixed issue where in some cases, the “search in hidden” option did not correctly locate
PnW2290	Fixed issue where in rare cases, the timestamps on Upstream and Downstream packet
PnW2304	Fixed rare issue where you may get a “Analyzer communication error” when operating V
PnW2322	Fixed issure where LFPS durations are shown 20-200ns shorter than they really are.
PnW2336	Fixed issure where USB 3.0 Exerciser didn’t always perform LMP exchange when link e instructions).
PnW2337	USB 3.0 Exerciser now correctly sets scrambling bit in TS2 according to specified scran
PnW2349	Fixed issue where in some cases, QuickTiming bar would incorrectly show 0% utilizatio
PnW2361	Fixed some mistakes in sample USB 3.0 exerciser scripts.
PnW2363	TRACE_B instruction in USB 3.0 exerciser script now works correctly.
PnW2387	Fixed issues where in some cases, Timing Calculator report incorrectly showed 0 for Ac
PnW2397	Fixed some issues with the accuracy of the TraceView scroll bar.
PnW2399	Automation API function “MakeRecording” works properly now.
PnW2401	Fixed issue where the viewing level would always get reset to “Packets” regardless of th
PnW2498	TS1/TS2 search from menu works correctly now.
PnW2566	USB 3.0 exerciser now provides VBUS in host mode.
PnW2437	Periodic Channel Capture Loss

4.7. Version 3.30 (Feb 6, 2009)

- This is version 3.30 of the USB Protocol Suite.
- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.04
    - Serdes BusEngine version 1.04
    - Firmware version 1.05
- This release supports the following specifications:
  - USB 3.0 specification version 1.0
  - USB 2.0 specification up to ECN of July 16, 2007
- This release includes the following updates:
  - USB 3.0 Exerciser – host and device emulation
  - Enhanced USB 3.0 Triggering
  - CATC Sync Card support – cascade multiple Voyagers for synchronized multi-channel recording
  - Improved USB 3.0 capture – better support for LFPS and Electrical Idle detection
  - USB 3.0 CRC errors are marked in red in SpecView
  - Quick-Packet Display - view recorded traffic while the trace file is still being uploaded
  - Import USB 3.0 traffic simulations via .csv file format
  - Dockable Timing Calculator window
  - Automatic script decoding assignments
  - Favorite Script Decoders option – customize which scripts are loaded to reduce application load time and memory usage

- This release includes fixes for the following issues:

Bug Id	Summary
PnW1858	Fixed issue where hiding packets in trace view did not hide packets in LinkTracker prop
PnW2072	OTG timing parameters file fixed.
PnW2098	Corrupted Link Commands are now correctly flagged and reported.
PnW2124	Search in Errors Summary now correctly finds Bad Turnaround/Timeout errors.
PnW2148	Fixed issues with USB 3.0 auto polarity inversion.
PnW2156	Fixed application hang when trying to decode transfers in a HS recording with lots of NA
PnW2162	Fixed issue where recorded OTG traffic only showed bus conditions.
PnW2169	Fixed issues when re-uploading buffers greater than 2GB.

4.8. Version 3.10 (Dec 11, 2008)

- This is version 3.10 of the USB Protocol Suite.
- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.03
    - Serdes BusEngine version 1.03
    - Firmware version 1.03
- This release includes the following updates:
  - Improved support for USB 3.0 capture
  - Support for USB 3.0 connectors on analyzer
  - Automatic notification when software updates are available
  - Basic USB 3.0 symbol triggering
  - Supports USB 3.0 specification version 1.0RC.
  - USB 3.0 Bus Utilization graphs
  - USB 3.0 Navigator view
  - USB 3.0 Real-Time Link Data Throughput graph

- This release includes fixes for the following issues:

Bug Id	Summary
PnW1798	Issues with resizing Class/Vendor decoding window on Vista fixed
PnW1811	Incorrect messages after BusEngine / Firmware update fixed
PnW1855	Issues opening USB 3.0 trace file with LinkTracker enabled are fixed
PnW1883	Trigger marker now shown in a trace for all trigger events
PnW1884	Problem with data truncation causing entire data packets to be filtered out fixed
PnW1887	Issues with trigger events not working if configured with a counter fixed
PnW1890	Issues with External SMA trigger in/out fixed
PnW1892	Issues with HS/Classic Bus Conditions triggers fixed
PnW1894	Issues triggering on 0-byte data payloads fixed
PnW1898	USB 2.0 HS microframe counts now shown in trace view.
PnW1901	Issue with "Software initialization failed" message on starting the application fixed
PnW1902	Issue updating BEs and Firmware over Ethernet fixed
PnW1904	Stability issues when turning off the unit connected over Ethernet fixed
PnW1916	Corrected GUI problems in Japanese version of XP
PnW1919	Issues saving recording after full buffer trace corrected
PnW1921	Issues with partial uploading over Ethernet fixed
PnW1922	Issues with Hide Link Commands option fixed
PnW1955	Issues with QuickTiming calculations on transfer level fixed
PnW1960	Issues opening legacy trace file by double clicking fixed
PnW1979	Issues with empty files uploading when using USB 2.0 host connection fixed

PnW1984	Issues with USBSuite.exe staying in the memory after exiting application when using Et
PnW1996	Issues with HNP requests decoding fixed
PnW2026	SOF hardware filtering fixed
PnW2027	Issues with empty traces when stopping upload before completion fixed
PnW2053	Corrected counters on SKPs and Idles
PnW2099	Corrected host/device mapping on MMCX connectors
PnW2101	Issues invoking SpecView on a packet with a hidden field fixed.
PnW2103	Issues launching app by double-clicking a .usb file fixed
PnW2104	Errors reporting "File cannot be closed" during save operation fixed
PnW2126	Issues decoding status stage of USB 3.0 control transfer fixed
PnW2133	Corrected behavior of Idle/SKP hardware filtering

4.9. Version 3.01 (Oct 20, 2008)

- This is version 3.01 of the USB Protocol Suite.
- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.02
    - Serdes BusEngine version 1.02
    - Firmware version 1.02
- This release includes the following updates:
  - Improved support for USB 3.0 capture
  - Automatic notification when software updates are available

- This release includes fixes for the following issues:

Bug Id	**Summary**
PnW1793	Opening Traffic Summary ca encountered" on a Vista sys
PnW1798	Class/Vendor decoding winc
PnW1811	BE or FW updated is followe No restart happens after BE
PnW1855	Crash when USB 3.0 trace f
PnW1861	Voyager captures bad USB
PnW1880	Under certain conditions, all traces in subsequent record analyzer.
PnW1883	Trigger marker is not shown
PnW1884	Setting data truncation may out.
PnW1887	Trigger events do not work i
PnW1890	External SMA trigger in/out r
PnW1892	HS/Classic Bus Conditions t
PnW1894	Data length trigger only trigg
PnW1898	USB 2.0 HS microframe cou
PnW1901	"Software initialization failed
PnW1902	Updating BEs and Fw over I unit caused a crash.
PnW1904	Turning off the unit connecte crash.
PnW1916	GUI problems in Japanese v
PnW1919	Recorded full buffer trace ca

PnW1921	Partial uploading does not w
PnW1922	Hide Link Commands optior
PnW1955	QuickTiming calculation sho level

4.10. Version 3.00 (Sept 27, 2008)

- This is version 3.00 of the USB Protocol Suite.
- This release supports the following LeCroy products:
  - Voyager M3
    - Main BusEngine version 1.00
    - Serdes BusEngine version 0.90
    - Firmware version 1.00
- This release includes the following updates:
  - Data View for USB 2.0 and 3.0 traffic
  - SpecView for USB 3.0 traffic to display exact bit positions of fields within packets, similar to the figures in the USB 3.0 specification
  - LinkTracker for USB 3.0 traffic to display link-level data flow and timing between upstream/downstream directions
  - Improved GUI for USB 2.0 triggering and filtering
  - QuickTiming markers for USB 2.0 and 3.0 traffic
  - Standard and Hub decoder scripts for USB 3.0 devices
  - Ethernet connectivity with analyzers
  - Remote analyzer connections (“Analyzer Network”)

USB Protocol Suite is based on previous releases of USBTracer/Trainer. The following is the history of changes to USBTracer/Trainer software.

4.11. Version 2.60 (Apr 14, 2008)

- This is version 2.60 of the USBTracer/Trainer™ product.
- This release contains the following components, which are necessary for the operation of the product:
  - USBTracer™ Application Version 2.60.
  - USBTracer™ Bus Engine Version 2.62 (Analyzer + Host Emulation) and Version 2.62 (Analyzer + Device Emulation).
  - USBTracer™ Firmware Version 1.09.
- This release includes the following updates:
  - Link Power Management support (USB 2.0 Specification Update)
  - Improved Vista compatibility
  - The following USB Class decoding is now supported:
    1. Personal Healthcare
    2. Content Security
  - Automation Command Line sample added
- This release includes the following fixes:
  - USBTrainer generating too long EOP due to concatenating packets [489]
  - Incorrect decoding in Get Descriptor [1261]

4.12. Version 2.50, Build 421 (July 20, 2007)

New Features:

- Windows Vista 32 and Windows Vista 64 support added
- The following USB Class decoding is now supported:
  1. IrDA
  2. ATAPI
  3. HTTP

4. IP

Bug Fixes:

- Separate Mass Storage SCSI Status Transfer from Data Transfer [619]
- Export of HiEOP value from Advisor to Generator Text file fixed [500]
- HID report descriptor decoding fix [709]

4.13. Version 2.32, Build 418 (June 12, 2007)

New Features:

- The following USB Class decoding is now supported:
  - Video Class 1.1
  - Communications Data Interface Class
  - Cable Based Association Framework (WUSB implementation)
  - Smart-Card Class (CCID + ICCD)
  - RNDIS

Bug Fixes:

- wChannelConfig standard audio descriptor incorrect decoding in description [362]
- iTerminal text for standard audio descriptor says input when it is an output terminal [363]
- HID report descriptor parser incorrectly decodes 32-bit tags [605]

4.14. Version 2.30, Build 388

New Features:

- Three new Transaction Levels were added: PTP Transaction, PTP Object and PTP Session.
- With the introduction of these new Transaction Levels the following decodes are now supported:
  - PictBridge
  - MTP
  - PTP
- The following decodes were updated to match the latest specifications:
  - Monitor (HID extension)
  - Physical Interface (force-feedback extension to HID)
  - Power (HID extension)
  - HUT (HID)
  - Point of sale Devices (HID extension)

Bug Fixes:

- Fix Wire Adapter decoding problems.
- Fix failure of Legacy Descriptor decoders in Transfer view.
- Fix Audio Class Decoding problems.
- Fix msb<->lsb incorrect order in Transfer Level Request Field display.
- Fix crash when hitting Intelliframe/Bitstream button in Gen file.
- Fix hiding by host/address/endpoint for control transactions and transfers.
- Fix crash when opening of USB Gen Files from Automation client. They now open explicitly when you start generation.

4.15. Version 2.20, Build 366

New Features:

- Certified Wireless USB Host and Device Wire Adapter (HWA & DWA) Transfer decoding. This gives the user a high-level view of the transfers passing through a Wire Adapter RPipe.
- Decoding assignment feature now includes support for Class/Vendor Request and Endpoint assignment to Certified Wireless USB HWA & DWA RPipes.
- Support for the Automation Analyzer Adapter.

Bug Fixes:

- Correct the totals on some reports in Traffic Summary. [C0006930]
- Fix software hang when trying to hide NAKs during transaction decoding. [C0006960]
- Fix software crash when decoding a trace file of a Low Speed enumeration through a High Speed hub.

[C0006954]
- Fix software bug that caused decoding of certain trace files to take a very long time. [C0006943]

4.16. Version 2.15, Build 358

New Features:
- Enhanced Navigator functionality.
- High Level Decoding Mapping User Interface Enhancements:
  - Access Decoding Dialog via "Decode" Button in Toolbar (Always available)
  - Access Decoding Dialog from ANY packet, transaction, or transfer (You previously had to look for an appropriate entry!)
  - Single click selection of decoders (was select then apply)
  - Selection choices now direction-aware (only applicable ones added to selection list)
- CCID Messages for Bulk Endpoint decoding were added
- Improved the Hub Class Decoding.
- Toggle Analysis improvements. (C0005148)

Bug Fixes:
- Fixed ACK direction field after tokens in splits. (C0005278)
- Fixed false incomplete for split IN transactions. (C0005322)
- Fixed issue with Standard Requests not being decoded when in Video Decode Script Decoding mode. (C0005399)
- Fixed issue with Data toggle and display errors when Control Endpoint is not endpoint 0. (C0006322)
- When converting from Interrupt Transfer to Bulk Transfer, data payload loses one byte of data. This was fixed in this release. (C0006508)
- Fixed issue with Mass Storage decoding (Incorrect data size when CSW is at end of transfer). Fixed issue with PTP decoding (Incorrect container length displayed). (C0006853)
- Now, 16 view flags are allowed compared to previously only 5 flags. (C0006855)
- Fixed bandwidth calculation to include NYET'ed traffic. (C0006044)
- Fixed issue of not marking incorrect packet length if data length is larger than speed and transfer type allows. (C0006343)
- Fixed issue with the Traffic File Editor Replace function not replacing the current found one. (C0006223)
- Fixed issue with data toggle and display errors when Control Endpoint is not endpoint 0. (C0006223)
- Syntax checker for wrap did not report errors on invalid memory usage used. This was fixed in this release. (C0006510)
- Trainer: Fixed issue with incorrect generation of audio files. (C0006825)
- Trainer: Fixed incorrect display of raw data error. (C0006509)
- Trainer: Device emulation generates incorrect packets and corrupts data when in a loop. (C0006479)

4.17. Version 2.12, Build 237

Bug Fixes:
- Device Emulation: Add configurable Device Resume Time
- Device Emulation: Fix Looping bugs
- Device Emulation: Fix Suspend/Resume functionality
- Host Generation: Add device resume capability: add wait_resume=HERE before resume=nnn statement
- For extremely large traces (> 16 million packets), allow for an special option for decoding files to try to prevent running out of memory while loading the file.
- Fix bug which corrupted a trace file during automatic updating from a previous release's file format.
- Fix hang when saving a modified .utg file while NAK's are hidden

4.18.Version 1.91, Build 200

New Features:
- Advanced Script-Based Decoding
- Mass Storage Bulk-Only SCSI Decode
- Updated Hub Decoder

- Update Bluetooth HCI decoder
- Added association of .utg Line Number with Packet on Screen,
- add ability to invoke Default Editor
- Preserve user overrides on Transfer Types (Interrupt vs. Bulk assignment)

Bug Fixes:

- Timing Calculator can now be closed when it's pinned
- Search for Frame Number, Empty Frames, and non-empty frames fixed

4.19. Version 1.81, Build 164

New Features:

- Faster Hiding of Packets
- Vendor ID's Decoded into their company name
- Hide Chirps button

Bug Fixes:

- Fix Jitter problem on some Automatic SOF's generated by USBTrainer
- Fix problem where fan could make noise when partially blocked on left side
- Fix problem which caused FW to need to be downloaded twice when plug-ins were changed
- Add a twenty seconds timeout to prevent infinite hang when I/O failure occurs during uploading.

4.20. Version 1.80, Build 160

New Features:

- Support for UPAS 2500H, a USB 2.0 High Speed interface to the host
- On-The-Go VBus monitoring (requires version 5 of USBTracer Plug-In)
- Navigator Window to help define areas of interest for scrolling within a trace file
- Dockable Bandwidth Calculator
- Descriptor Decoding window is now sizeable
- .VCD file importing function
- Marker dialog can remain open while navigating through trace file
- Add ability to check syntax on a .utg file without downloading it to the bus engine
- Search for Transfer Data Length
- View Transfer Data Block
- Trigger on Data Length Equals, Less than, Greater than, and Not Equal to a value
- F1 key-based Help
- Explorer plug-in for previewing .usb files
- Partial Upload capability allows efficient conditional use of large traces
- Generator can now generate SE0 conditions smaller than 2.5uSec

Bug Fixes:

- Next and Previous buttons in Decoding Dialog fixed
- Fix crash when hitting Hide Devices button after previously closing it with the close box (rather than the Apply button)
- Fix ability to hide packets based on speed
- MDATA Packet Direction fixed
- Formulas now shown for Timing Calculator
- Fix Export Data bug which exported data from NAK'ed transactions
- Export Data now works on transfers over 1 million
- Fix bug with recording more than 256 meg when USBTrainer plugged in
- Fix hang when hitting Start/Stop button on box when no USBTrainer Plug-In
- Fix bug which did not allow DATA2 pids in .utg file
- Fix decoding of High Bandwidth Isoch Transfers

- Fix false toggle violation when GET Control Transfer returns no data
- Fix incorrect identification of Bulk transfer on low speed branch
- Fix incorrect toggle violation after Chirp Sequence
- Fix misc bugs in Timing Calculator
- Fix incorrect explicit frame numbers during export of Hi-Speed traffic to .utg file.
- Fix bug which prevented partial nibble mask/match values in data related Recording Resources (Data Pattern, Transactions, Device Requests)

4.21. Version 1.71, Build 137

New Features:

- Transaction Decoding in Background allows quicker access to viewing traces
- Search for Splits
- Performance Enhancements
- Updating older files to current versions is now under User's control
- User can override transfer types identified for some Interrupt and Bulk transfers, in case analyzer was not able to distinguish them properly
- User can choose Quick Search for Pid's and some Bus Conditions, at the cost of greater memory use. Also speeds up SOF/NAK hiding.
- Quick search for ANY Errors
- Add ability to default to Data Fields Expanded

Bug Fixes:

- Installation fixed to avoid possibility of accidental deletion of user's trace files or other files in the USBTracer directory during uninstall,
- Fix crash upon loading previous version files that contain Markers
- Fix decoding of OTHER_SPEED_CONFIGURATION descriptor
- Fix crash when doing time calculations on Empty trace
- Fix bug that prevented USBChief files of release 1.33 from being converted to current format.
- Fix bad and or missing packets when recording on rev 3 or below USBTracer Plug-Ins
- Improve Transfer Decoding algorithms to better identify transfer types
- Fixes to OTG decoding algorithms
- Fix bug which caused Packet Lengths to be reported as 0
- Fix Auto-Merge recording options feature
- Fix incorrect (bogus) packets which incorrectly show Data Truncation
- Fix virtual memory problem in Export to Generator Text feature
- Fix counters in Recording Options (only went to 255, now 65535)
- Fix crash when double-clicking on a .usb file

4.22. Version 1.70, Build 111

New Features:

- OTG (On-The-Go) Protocol Support: HNP and SRP decoding and searching
- Trigger Sequence Enhancements: Up to 7 levels of trigger event sequencing for ALL event types. In addition, up to 2 of these events can utilize Counters.
- Real-time Statistics of running traffic (At any time, Tracing or not!)
- New, more complete, easier to use Display Options Dialog.
- Automation (Remote Control) Interface and API available
- Up to 512 Mb Trace with or without USBTrainer module plugged in
- Search in Hidden (Search for packets even if they are currently hidden from view)
- Find All search function
- Licensing and Maintenance infrastructure
- Split Token trigger resource

- Packet Direction field in Packet View
- Identify and report incomplete byte errors
- Trigger on incomplete bytes
- Trigger on 8-bit ext Data Pattern input (Data7-Data0 on Beakout Board)
- Trigger on High Speed bus conditions (Chirp, Full Speed J, Full Speed K)
- Bluetooth Decoding file is now 1.1 compliant
- Add search for FS bus conditions on High Speed Branch
- Go To Channel #
- Go To Host, HNP, or SRP for On-The-Go traces
- Windows: Tile Vertical as well as Horizontal
- Performance Enhancements

Bug Fixes:

- Fix crash when hitting Device button in Bandwidth Calculator
- Fix problem preventing "raw_data=" from working in Generator
- Channel in Recording Options dialog not set correctly after saving .rec file
- Toolbar icons now correct after an install
- GP Extern Out forms not staying set
- Fix 2.0 GetDescriptors and SetDescriptors decoding
- Position Markers accurately in .utg files
- Occasional crash when reading .utg files
- Merging Advisor files from USBTracer and vice versa caused crash
- Fix formats selection for External Data field
- Seperate Intelliframe and Bitstream buttons for Generator
- Fix crash when scrolling an empty trace window
- Fix false toggle errors after a Bus Reset condition

4.23. Version 1.60, Build 90

New Features:

- Load/Display .utg Generator files similar to .usb files
- CHIRP sequence recording
- Low Clock Speed generation and trace capturing for Classic Speed traffic
- Low Clock Speed generation and trace capturing for High Speed traffic (Purchaseable option)
- Bus Utilization view
- Drop-down display option menus on Packet Fields
- Trigger on Data Length
- 8 bits of External Data Saved (vs 2)
- Rear panel BNC Trigger Input supported
- Markers are now supported for Transactions
- Option of displaying Timestamp in Nanoseconds
- USBTrainer: NAK/NYET automatic retry in Intelliframe Mode
- USBTrainer: Breakpoints
- USBTrainer: Specify # of bits in raw_data packet

Bug Fixes:

- Fix idle time calculations when packets are preceded by or follow bus conditions and/or packets of different speeds (low speed on full speed branch)
- Fix error in Suspend Detection
- Fix error which caused faulty data to be displayed in the transaction view of a packet which had errors
- SplitTransaction faulty toggle violations fixed
- Export Data works on Control Transfers now.
- Export to Gen File:
  - Increase precision of generator idle times
  - Markers cause syntax error

- Fix incorrect suspend times
- Fix problem where saving without Naked transactions caused expected_pids to accidentally disappear

4.24. Version 1.50, Build 65

Added Feature:
Classic Speed Slow Clock Generation. Outputs USB bitstream at fractions of the standard bit-rate.
Bug Fixes:

- Fix incorrect toggle errors on ISOC split transaction
- Fix problem where ISOC transactions were being mis-interpreted as BULK transactions, and vice-versa
- Fix problem with doing a SaveAs from Advisor on a USBTracer file (and vice-versa) was reporting numerous errors incorrectly.
- Fix bug where toggle/timeout errors were being reported on addresses that were not on the USB wire under test.
- Fix bug which caused dropped trace data blocks ~30 packets before the end of a trace after stop button is hit. Generally causes a false CRC problem,
- but could be others. Effects only high speed traces.
- Add checking for ENDPOINT_HALT to reset toggle state of an endpoint. Prior to this, toggle state was incorrectly shown as being an error in half of the cases.
- Fix bug which would cause incorrect data toggle and timeout error analysis on devices with addresses above 63.

4.25. Version 1.42, Build 63

Bug Fixes:

- Fix Ping output in Export to Gen File
- Framing error in High Speed during reset: was showing errors on 2 packets, should have been 1.
- Generator: raw_data=(xx) fixed
- Use better filter for transceiver glitches to prevent regular Bad Packets from being filtered
- Show missing NAKs as errors (They were not being shown at any level)
- Fix various toggle violation errors: show ones that were being missed, remove false reports.
- Fix various turnaround/timeout violation errors: show ones that were being missed, remove false reports.
- Make turnaround violation visible at Transaction level
- Add checking for legal keywords and values in .utg file
- Fix exporting Low Speed trace to Gen File
- Make Timestamps on consecutive Packets which are the same an Internal Error
- Fix bug which caused bad data packets to be generated sometimes when bit stuffing had occurred.
- Fix Bus Conditions timestamp and duration precision.
- Fix Suspend/Resume generation problems
- Fix tooltip/taskbar interference bug in Windows NT/2K
- Fixed RESTART Recording Option Action for Counters and Sequencers.
- Time Stamp precision improvements
- Fix bug in Suspend and Resume duration calculations.
- Fix DRAM Power-on test
- Fix bad packets at the beginning of a High Speed trace when in Auto-detect mode
- Fix erroneous error packets on full speed during auto-detect.

4.26. Version 1.41, Build 62

Updated release of USBTracer. Contains support for USBTrainer.

4.27. Version 1.40, Build 57

This is the first release of USBTracer.

5. Support

Online Download

Please periodically check LeCroy Protocol Solutions Group's web site for software updates and other support related to this product. Software updates are available to those users with current Maintenance Agreements.

Online Support

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